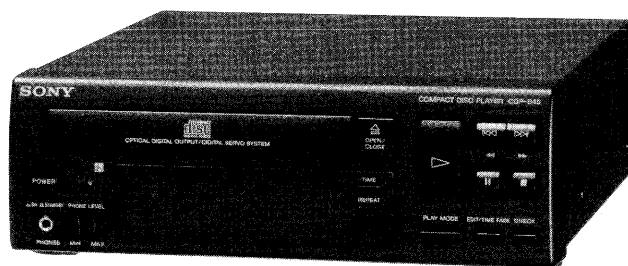


CDP-S45

SERVICE MANUAL

*AEP Model
E Model
Australian Model
Tourist Model*



Model Name Using Similer Mechanism	CDP-211/311
CD Mechanism Type	CDM14M-5BD10
Base Unit Type	BU-5BD10B
Optical Pick-up Type	KSS-240A

SPECIFICATIONS

Compact Disc Player

System	Compact disc digital audio system
Laser	Semiconductor laser
Wavelength	780 – 790 nm
Frequency response	2 Hz – 20 kHz (± 0.5 dB)
Signal to noise ratio	More than 98 dB
Dynamic range	More than 98 dB
Harmonic distortion	Less than 0.005 %
Channel separation	More than 93 dB

Outputs

LINE OUT (phono jacks)	Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms
DIGITAL OUT* (OPTICAL) (optical output connector)	Wave length 660 nm Output level -18 dBm
PHONES (stereo phone jack)	Output level max. 10 mW Load impedance 32 ohms

General

Power requirements	Model for Continental Europe 220 – 230 V AC, 50/60 Hz Model for other countries 110 – 120 or 220 – 240 V AC adjustable, 50/60 Hz
Power consumption	10 W
Dimensions	Approx. 225 × 75 × 230 mm (w/h/d) (8 ⁷ / ₈ × 3 × 9 ¹ / ₈ inches) Including projecting parts and controls
Mass	Approx. 1.8 kg (4 lb), net

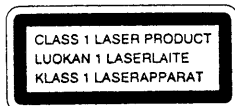
Remote Commander RM-D320

Remote control system	Infrared control
Power requirements	3 V DC with two size AA batteries (IEC designation R6)
Dimensions	Approx. 44 × 21 × 185 mm (w/h/d) (1 ³ / ₄ × 7 ⁷ / ₈ × 7 ³ / ₈ inches)
Mass	Approx. 100 g (4 oz) including batteries
* Model for Continental Europe	

Design and specifications are subject to change without notice.

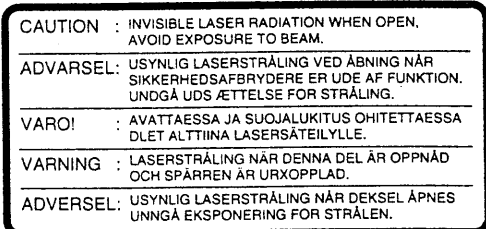
COMPACT DISC PLAYER
SONY[®]

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



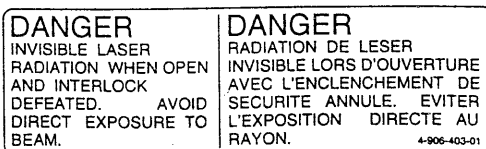
This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

The following caution label is located inside the unit.



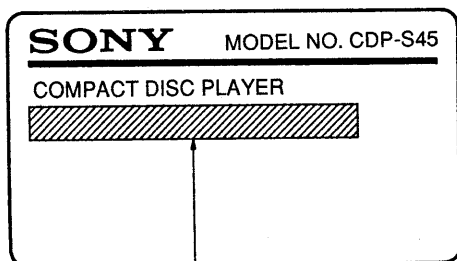
For Customers in Australia

The following caution label is located inside the unit.



MODEL IDENTIFICATION

— Specification Label —



AEP,G model : AC220—230V~50/60Hz, 10W

AUS model : AC240V~50/60Hz

E, EA, JE model : AC : 110 — 120, 220 — 240V~50/60Hz 10W

- EA : Saudi Arabia model
- AUS : Australian model
- JE : Tourist model
- G : German model

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

TABLE OF CONTENTS

Section	Title	Page
1.	SERVICING NOTE.....	3
2.	GENERAL.....	4
3.	ELECTRICAL BLOCK CHECKING.....	5
4.	DIAGRAMS	
4-1.	Block Diagram	7
4-2.	Printed Wiring Boards	10
4-3.	Schematic Diagram	13
4-4.	Semiconductor Lead Layouts	17
4-5.	IC Pin Functions	
	• IC101 (CXD2515Q)	17
	• IC301 (CXD2565AM)	18
	• IC201 (CXP82316-037Q)	19
5.	EXPLODED VIEWS	
5-1.	Cabinet Section	21
5-2.	CD Mechanism Section (CDM14M-5BD10)	22
5-3.	Optical Pick-up Block Section (BU-5BD10B)	23
6.	ELECTRICAL PARTS LIST	24

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1

SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

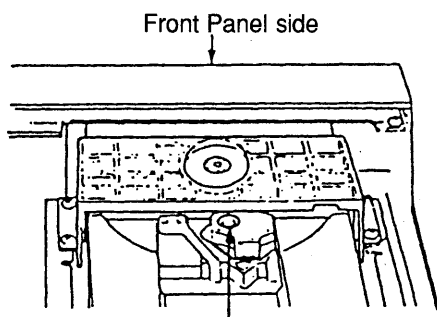
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Make POWER switch on with no disc inserted and disc table closed.
2. Confirm that the following operation is performed while observing the objective lens.



- ① Confirm that laser beam is spread.
- ② Up and down motion of the objective lens. (3 times)

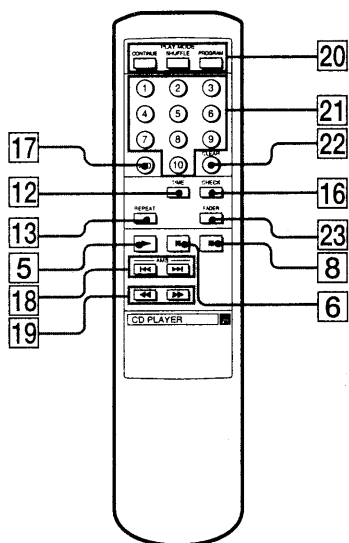
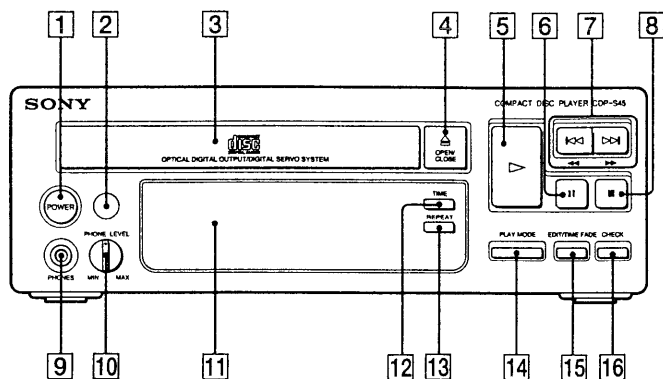
SECTION 2 GENERAL

This section is extracted from instruction manual.

Identifying the Parts

Front Panel and Remote Commander

See the pages indicated in () for details.



- 1 POWER switch (16)
- 2 Remote sensor (10)
- 3 Disc tray
- 4 OPEN/CLOSE button (16)
- 5 (play) button (16)
- 6 (pause) button (16)
- 7 AMS/manual search buttons (20)
- 8 (stop) button (16)
- 9 PHONES jack (18)
- 10 PHONE LEVEL control (18)
- 11 Display (16)
- 12 TIME button (18)
- 13 REPEAT button (32)
- 14 PLAY MODE button (24)
- 15 EDIT/TIME FADE button (34)
- 16 CHECK button (30)
- 17 stop button (20)
- 18 AMS buttons (20)*
- 19 (manual search) buttons (22)
- 20 PLAY MODE buttons
 - CONTINUE button (24)
 - SHUFFLE button (24)
 - PROGRAM button (26)
- 21 Numeric buttons (20)
- 22 CLEAR button (28)
- 23 FADER button (22)

* AMS is the abbreviation for Automatic Music Sensor.

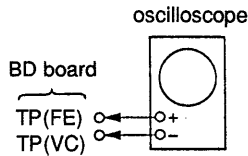
SECTION 3

ELECTRICAL BLOCK CHECKING

Note :

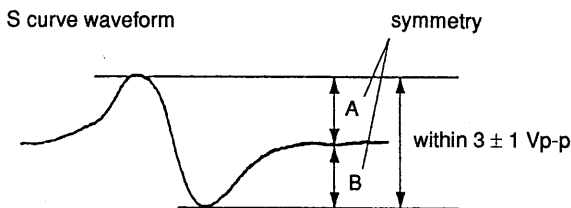
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than $10M\Omega$ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal lever is low than specified value with the following checks.

S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FE) on BD board.
2. Connect between test point TP (FEI) and TP (VC) by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak level within 3 ± 1 Vp-p.

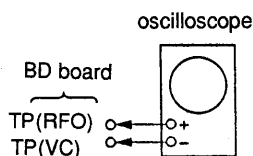


6. After check, remove the lead wire connected in step 2.

Note :

- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check



Procedure :

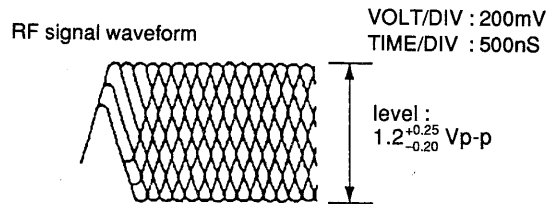
1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turned Power switch on.

3. Put disc (YEDS-18) in and playback.

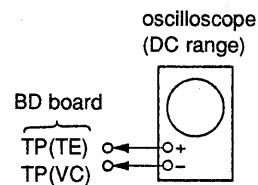
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

Clear RF signal waveform means that the shape “◇” can be clearly distinguished at the center of the waveform.

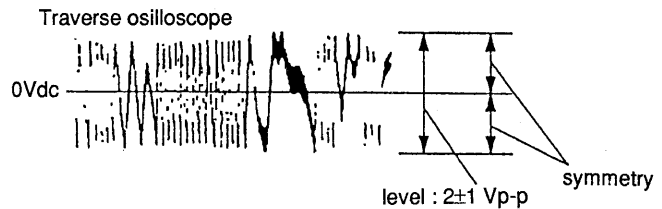


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) on MAIN board to ground and TP(TEI) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TE) on BD board.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.

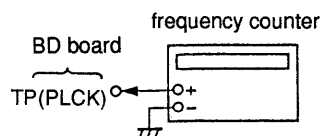


6. Remove the lead wire connected in step 1.

RF Free-run Frequency Check

Procedure :

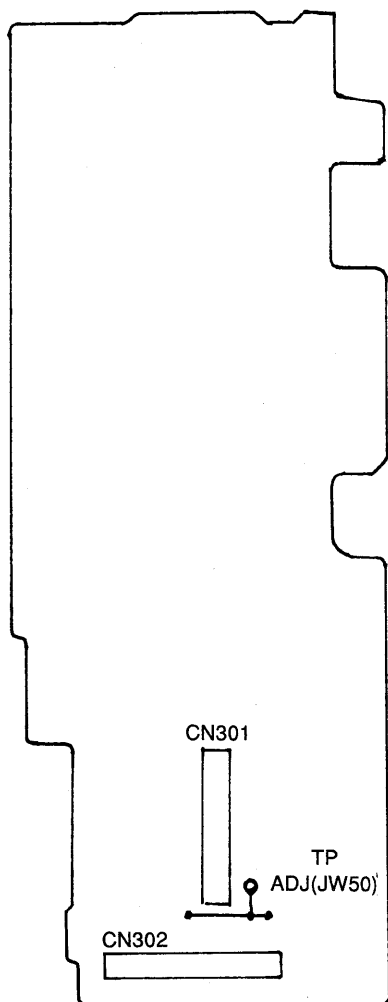
1. Connect frequency counter to test point (PLCK) with lead wire.



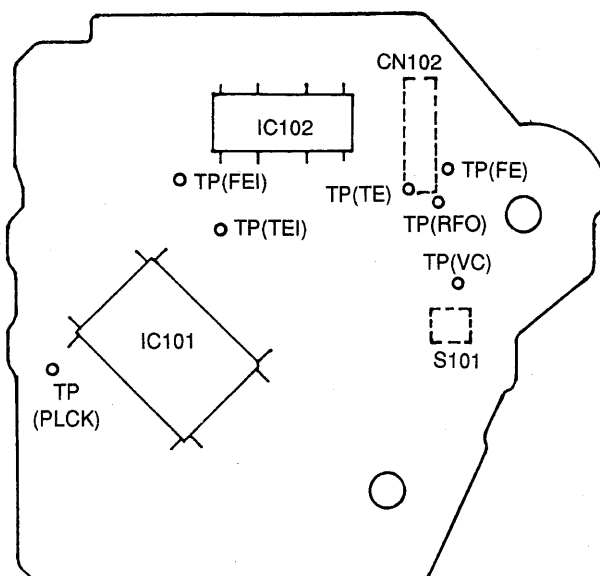
2. Turned Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

Adjustment Location :

[MAIN BOARD] — Component Side —

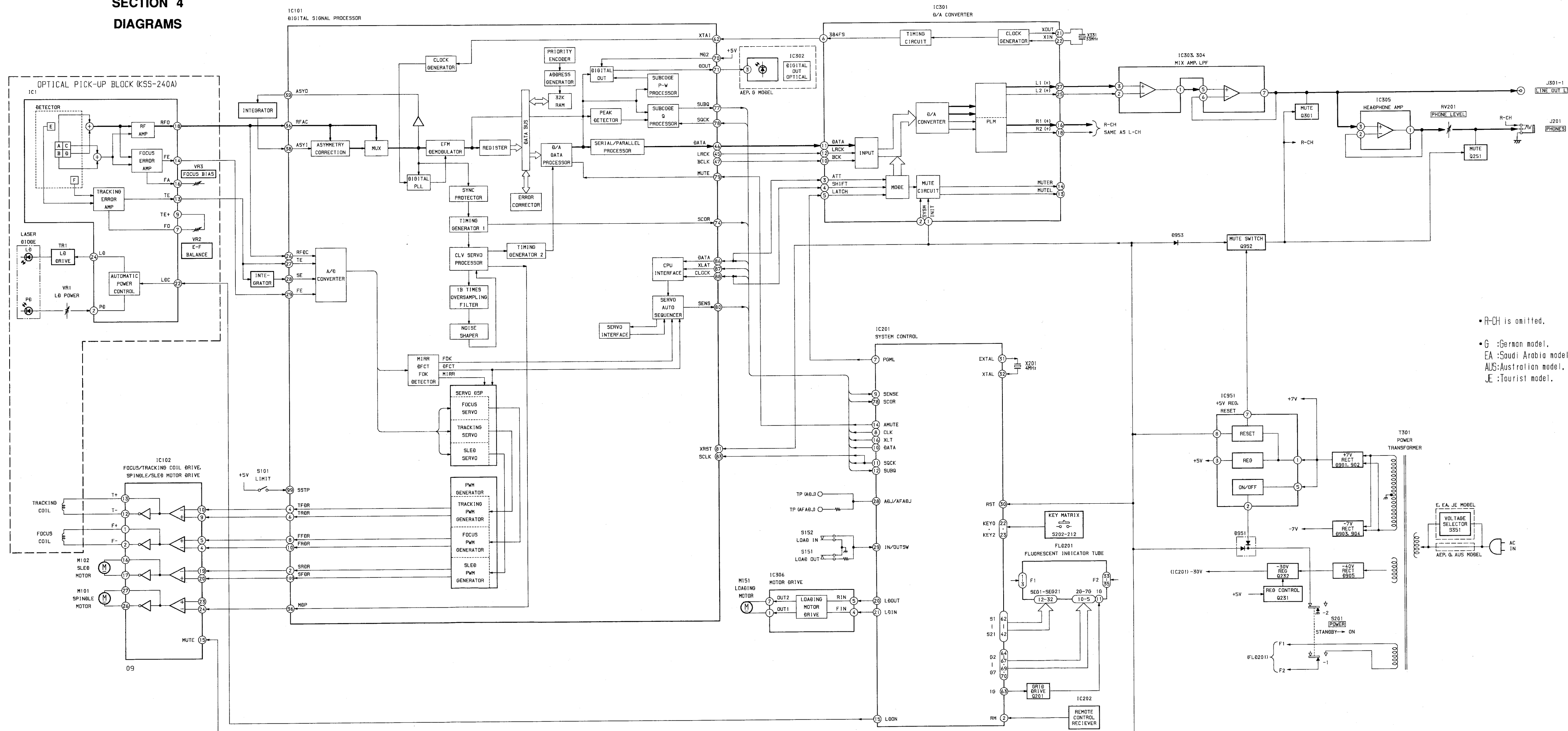


[BD BOARD] — Conductor Side —



SECTION 4 DIAGRAMS

4-1. BLOCK DIAGRAM



• R-CH is omitted.

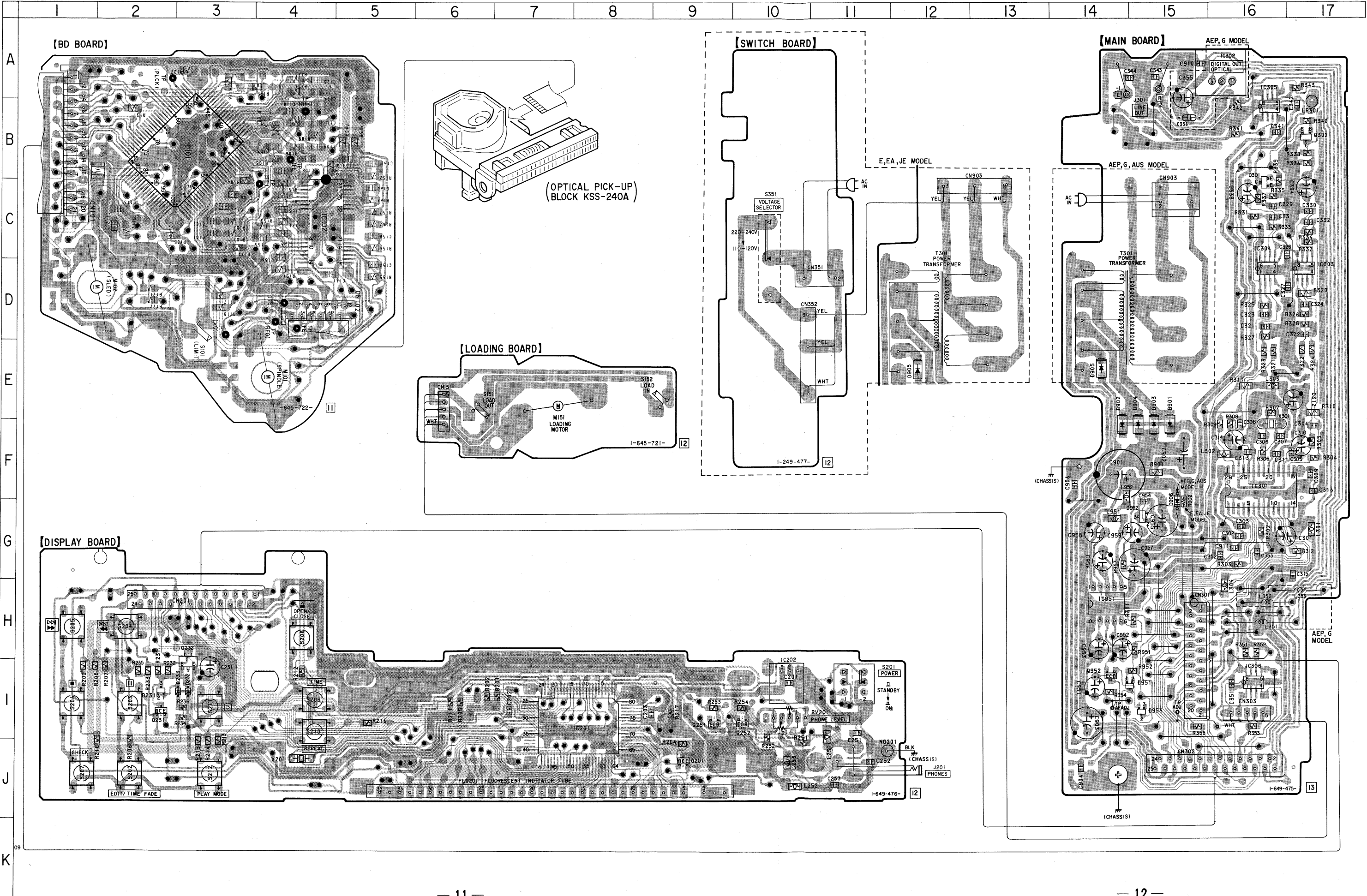
• G : German model.
EA : Saudi Arabia model.
AUS : Australian model.
JE : Tourist model.

4-2. PRINTED WIRING BOARDS
• See page 17 for Semiconductor Lead Layouts.

• Semiconductor Location

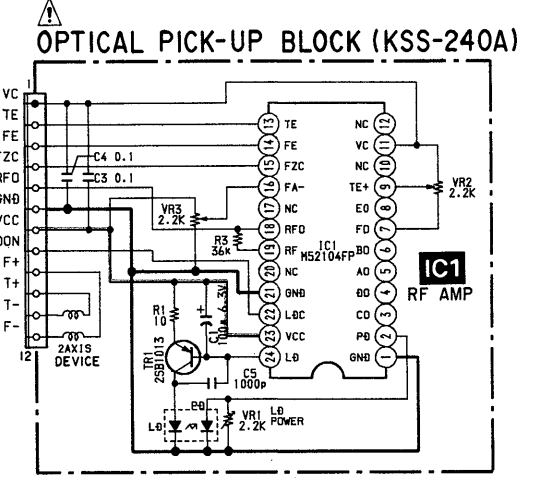
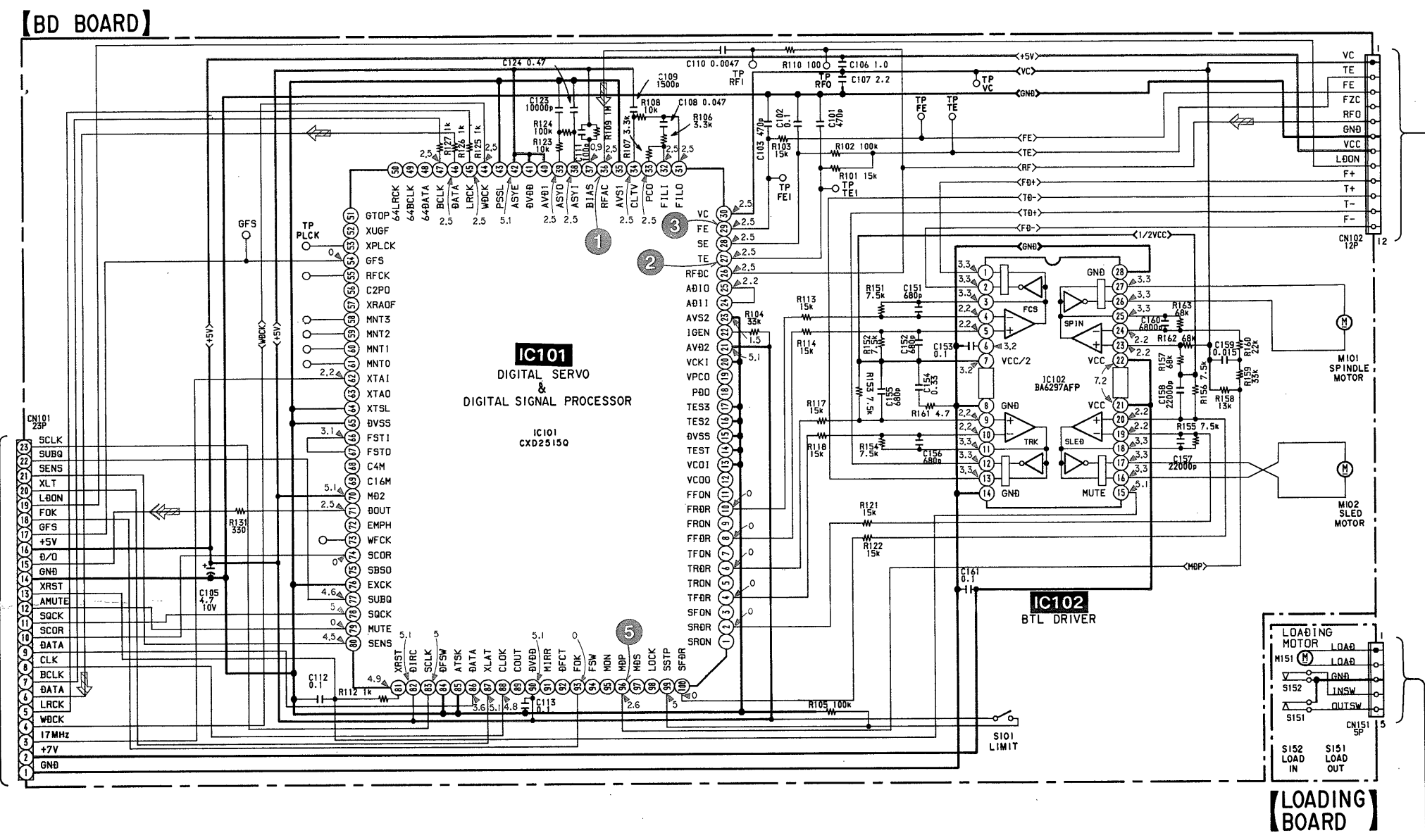
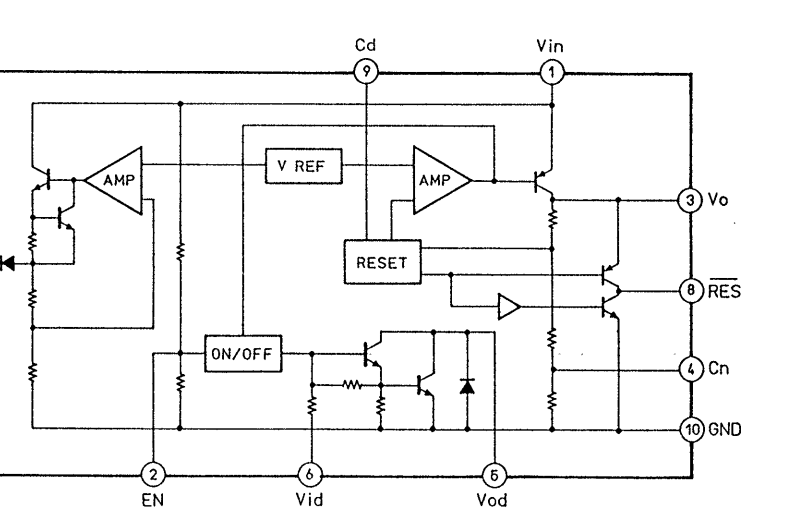
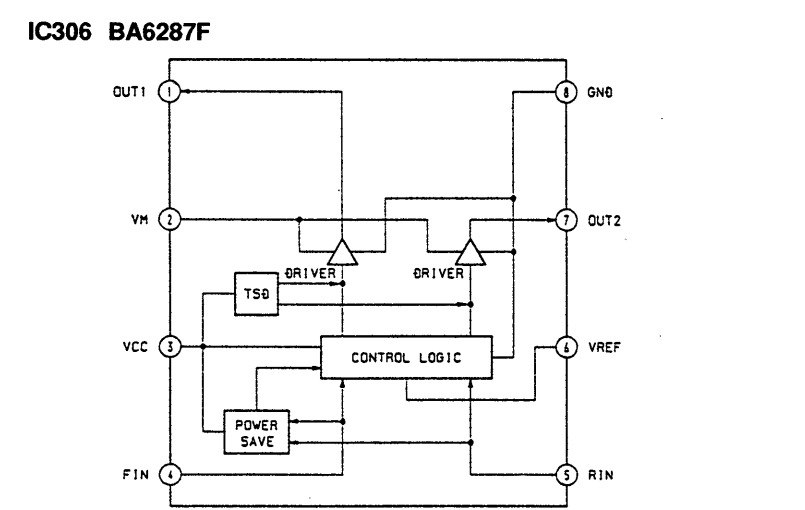
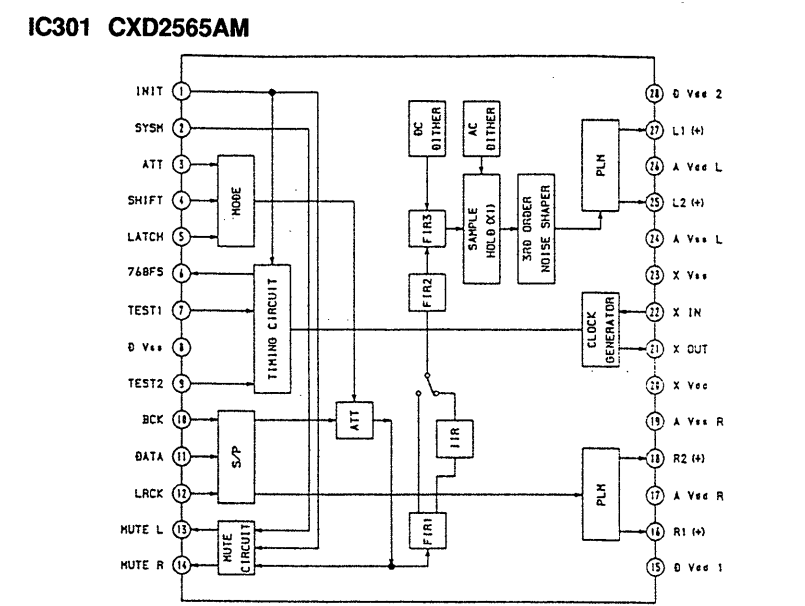
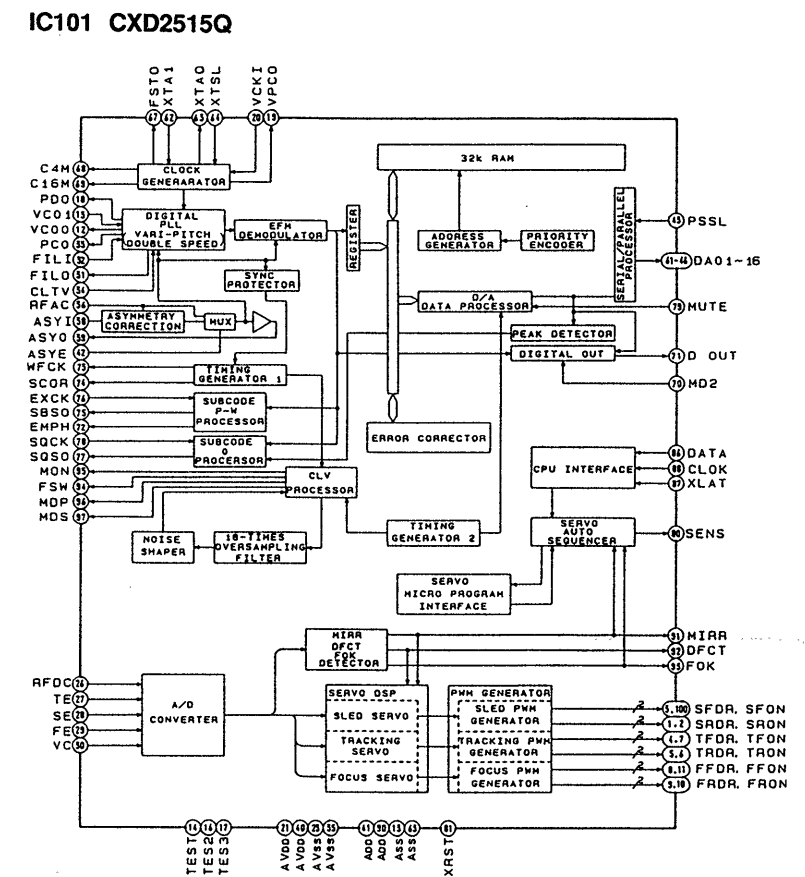
Ref. No.	Location
D231	I-2
D232	I-3
D233	I-3
D901	E-15
D902	E-14
D903	E-15
D904	E-15
D905	E-14
D906	F-15
D951	I-15
D952	G-15
D953	I-15
IC101	B-3
IC102	C-4
IC201	I-8
IC202	H-10
IC301	F-16
IC302	A-16
IC303	C-17
IC304	C-16
IC305	A-16
IC306	I-16
IC951	H-14
Q201	J-9
Q231	I-2
Q232	H-3
Q251	I-9
Q252	I-10
Q301	B-16
Q302	B-17
Q952	I-14

- Note:**
- : parts extracted from the component side.
 - : Through hole.
 - ▬ : Pattern from the side which enable seeing.
 - ▨ : Pattern of the rear side.
 - G : German model.
 - EA : Saudi Arabia model.
 - AUS : Australian model.
 - JE : Tourist model.



4-3. SCHEMATIC DIAGRAM
See page 17 for IC Pin Functions.
(IC101, 201, 301)

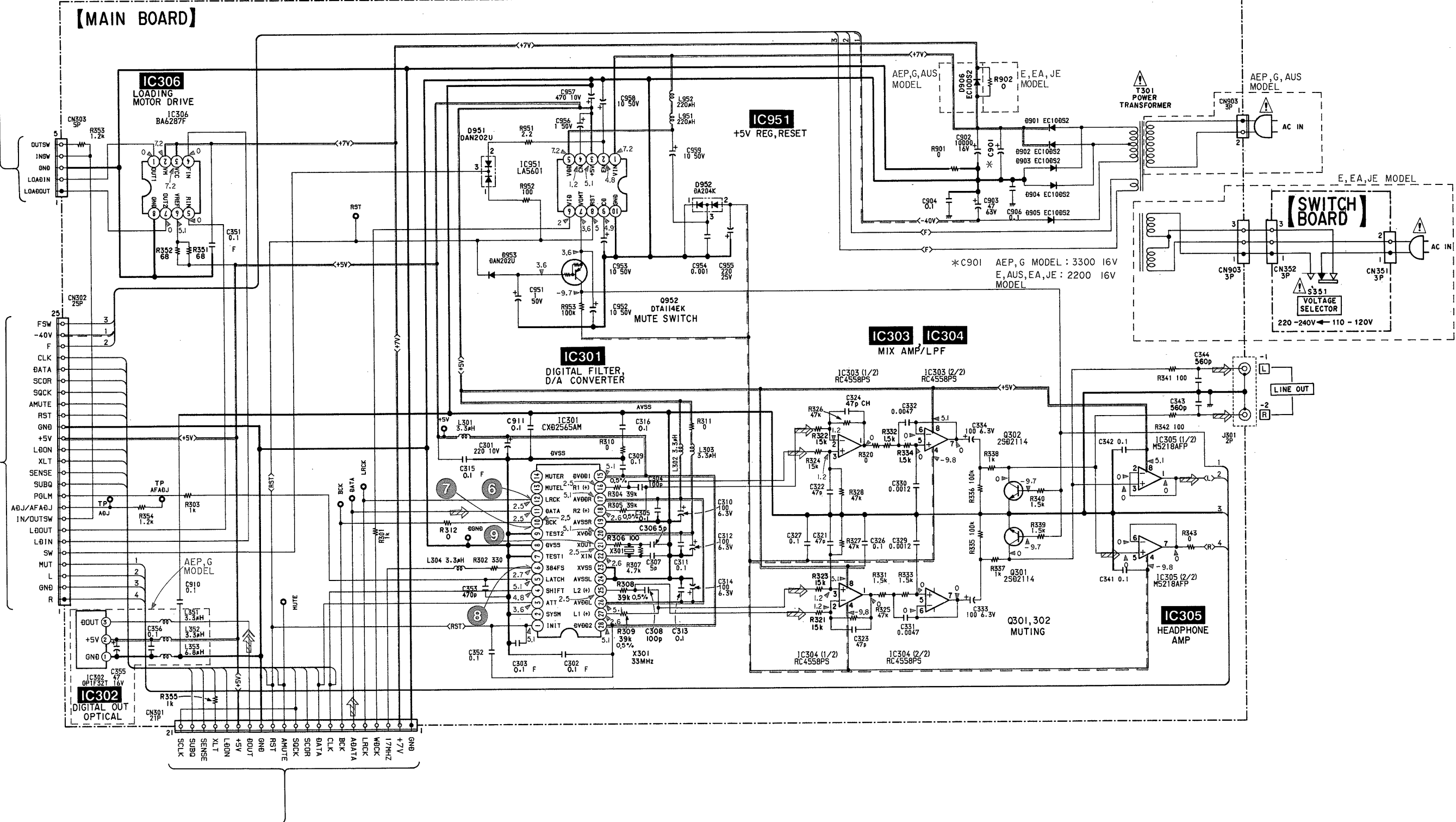
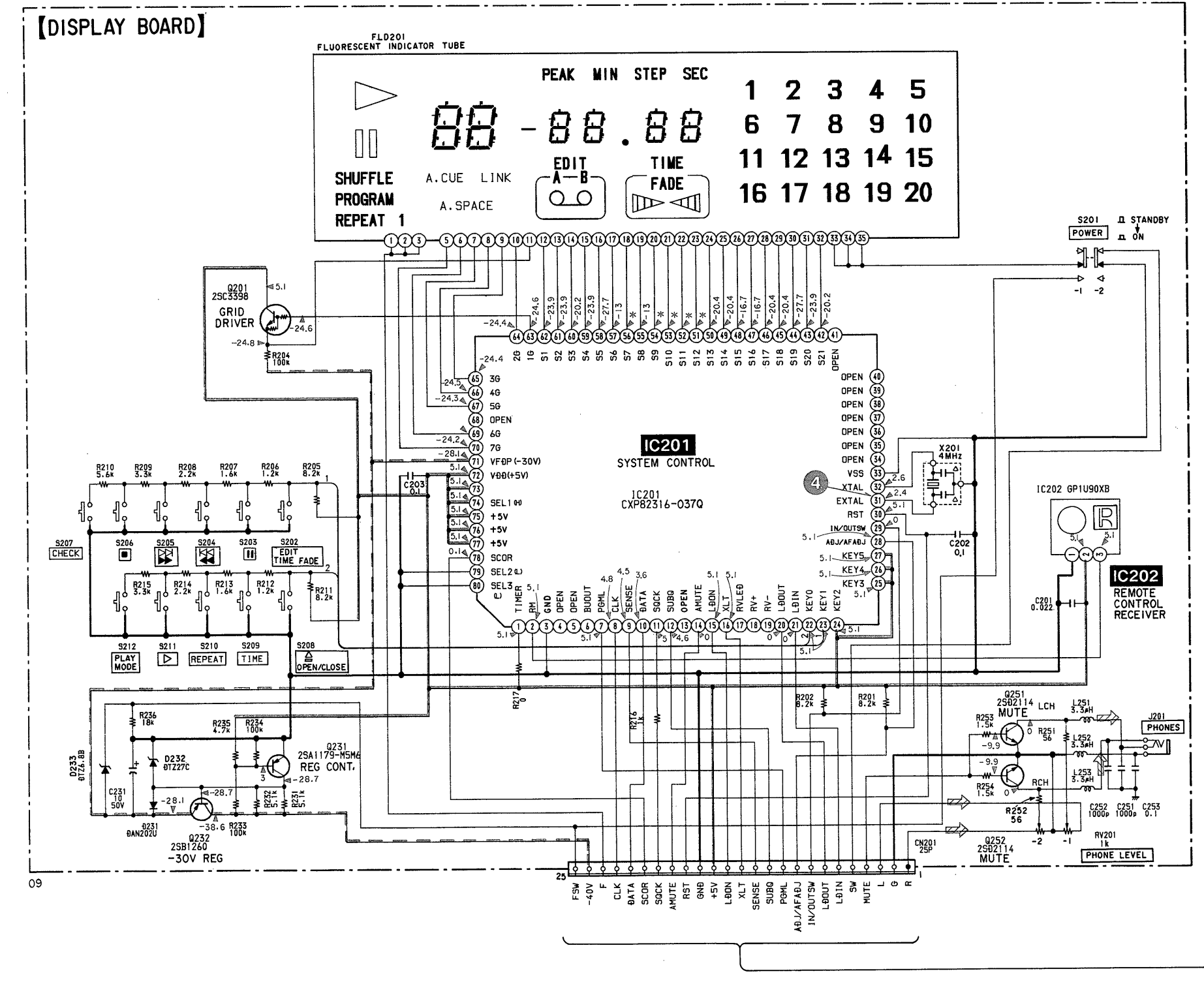
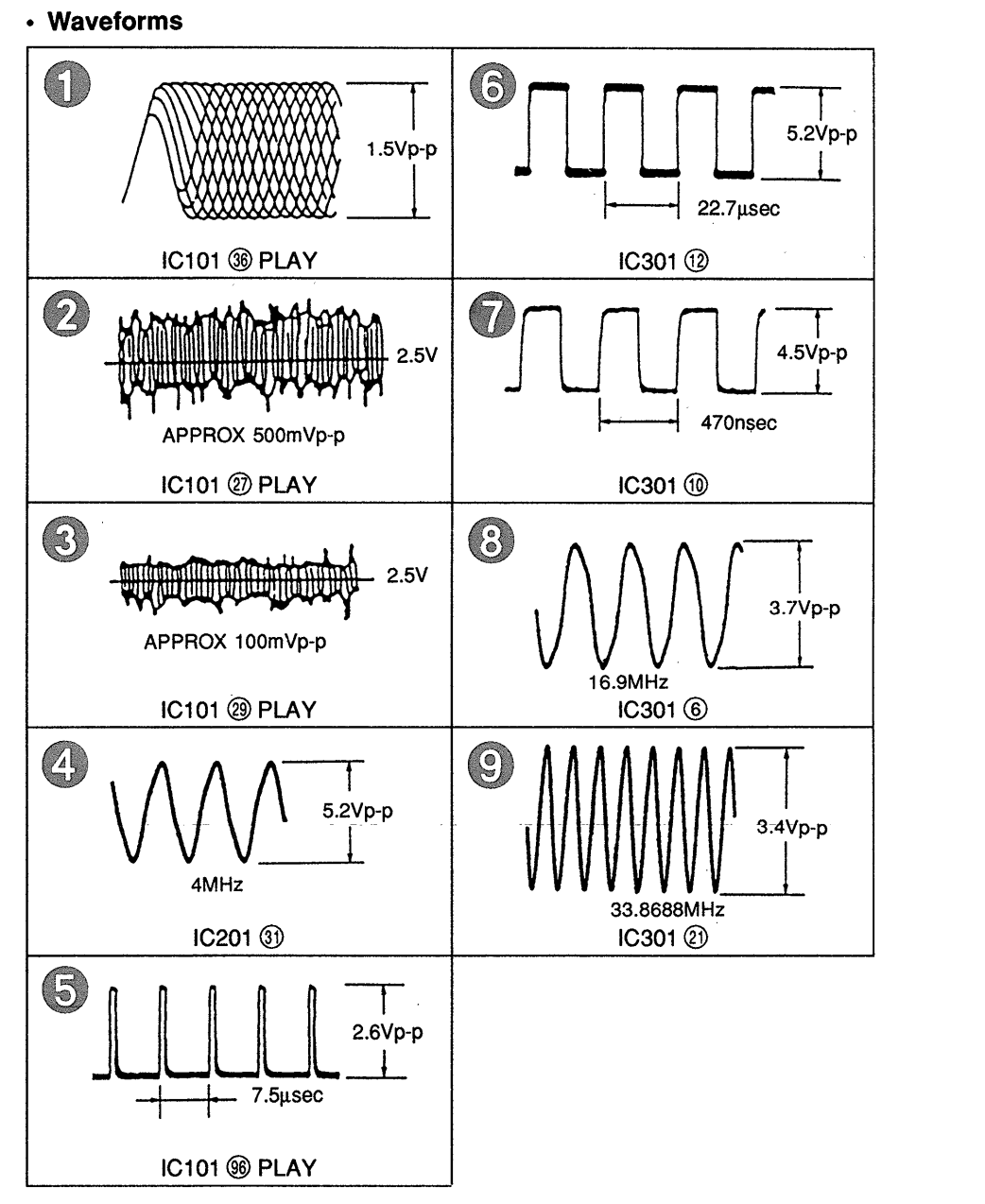
IC Block Diagrams



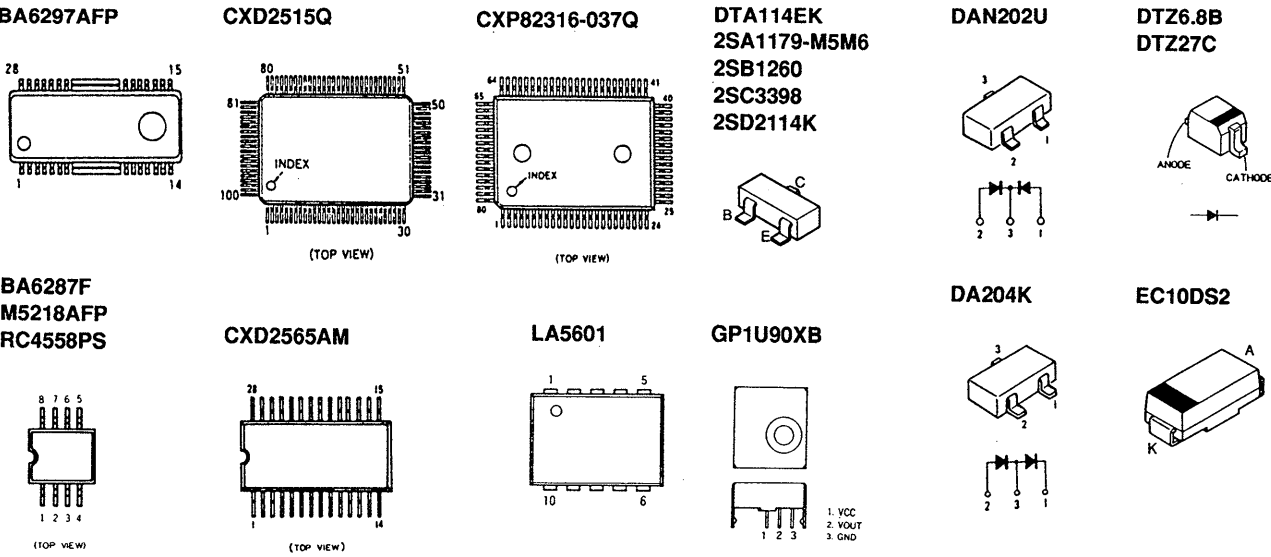
Note:

- All capacitors are in μF unless otherwise noted. pF is μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- Δ : internal component.
- $\square$: panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.



4-4. SEMICONDUCTOR LEAD LAYOUTS



4-5. IC PIN FUNCTIONS

• IC101 (CXD2515Q)

Pin No.	Pin Name	I/O	Function
1	SRON	O	Sled drive output
2	SRDR	O	Sled drive output
3	SFON	O	Sled drive output
4	TFDR	O	Tracking drive output
5	TRON	O	Tracking drive output
6	TRDR	O	Tracking drive output
7	TFON	O	Tracking drive output
8	FFDR	O	Focus drive output
9	FRON	O	Focus drive output
10	FRDR	O	Focus drive output
11	FFON	O	Focus drive output
12	VCOO	O	VCO output for analog EFM PLL
13	VCOI	I	VCO output for analog EFM PLL
14	TEST	I	TEST pin connected normally to GND
15	DVss	—	Digital GND
16	TES2	I	TEST pin connected normally to GND
17	TES3	I	TEST pin connected normally to GND
18	PDO	O	Charge-pump output for analog EFM PLL
19	VPCO	O	Charge-pump output for variable pitch PLL
20	VCKI	I	Clock input from variable pitch external VCO
21	AVD2	—	Analog power supply
22	IGEN	I	Power supply pin for operational amplifiers
23	AVS2	—	Analog GND
24	ADII	I	Input pin for A/D converter
25	ADIO	O	Operational amplifier output pin
26	RFDC	I	RF signal input
27	TE	I	Tracking error signal input
28	SE	I	Sled error signal input
29	FE	I	Focus error signal input
30	VC	I	Center voltage input pin
31	FILO	O	Filter output for master PLL
32	FILI	I	Filter input for master PLL
33	PCO	O	Charge-pump output for master PLL
34	CLTV	I	Control voltage input for master VCO
35	AVS1	—	Analog GND
36	RFAC	I	EFM signal input
37	BIAS	I	Asymmetry circuit constant current input
38	ASY1	I	Asymmetry compare voltage input
39	ASYO	O	EFM full swing output
40	AVD1	—	Analog power supply

Pin No.	Pin Name	I/O	Function
41	DVDD	—	Digital power supply
42	ASYE	I	Asymmetry circuit ON/OFF
43	PSSL	I	Audio data output mode selection input
44	WDCK	O	48-bit slot D/A interface. Word clock
45	LRCK	O	48-bit slot D/A interface. LR clock
46	DATA	O	DA 16 output when PSSL=1. 48-bit slot serial data when PSSL=0
47	BCLK	O	DA 15 output when PSSL=1. 48-bit slot data when PSSL=0
48	64DATA	O	DA 14 output when PSSL=1. 64-bit slot data when PSSL=0
49	64BCLK	O	DA 13 output when PSSL=1. 64-bit slot data when PSSL=0
50	64LRCK	O	DA 12 output when PSSL=1. 64-bit slot data when PSSL=0
51	GTOP	O	DA 11 output when PSSL=1. GTOP output when PSSL=0
52	XUGF	O	DA 10 output when PSSL=1. XUGF output when PSSL=0
53	XPLCK	O	DA 09 output when PSSL=1. XPLCK output when PSSL=0
54	GFS	O	DA 08 output when PSSL=1. GFS output when PSSL=0
55	PFCK	O	DA 07 output when PSSL=1. RFCK output when PSSL=0
56	C2PO	O	DA 06 output when PSSL=1. C2PO output when PSSL=0
57	XRAOF	O	DA 05 output when PSSL=1. XRAOF output when PSSL=0
58	MNT3	O	DA 04 output when PSSL=1. MNT3 output when PSSL=0
59	MNT2	O	DA 03 output when PSSL=1. MNT2 output when PSSL=0
60	MNT1	O	DA 02 output when PSSL=1. MNT1 output when PSSL=0
61	MNT0	O	DA 01 output when PSSL=1. MNT0 output when PSSL=0
62	XTAI	I	X'tal oscillator circuit input
63	XTAO	O	X'tal oscillator circuit output
64	XTSL	I	X'tal selection input pin
65	DVss	—	Digital GND
66	FSTI	I	2/3 divider output of pins 62, 63
67	FSTO	O	2/3 divider output of pins 62, 63
68	C4M	O	4.2336 MHz output
69	C16M	O	16.9344 MHz output
70	MD2	I	Digital-out ON/OFF control pin
71	DOUT	O	Digital-out output pin
72	EMPH	O	Playback disc output in emphasis mode
73	WCK	O	WCK output
74	SCOR	O	Sub-code sync output
75	SBSO	O	Sub-P through Sub-W serial output
76	EXCK	I	Clock input for SBS0 read-out
77	SUBQ	O	Sub-Q 80-bit output
78	SQCK	I	Clock input for SQS0 read-out
79	MUTE	I	Muting selection pin
80	SENS	O	SENS output
81	XRST	I	System reset
82	DIRC	I	Used in 1-track jump mode
83	SCLK	I	SENS serial data read-out clock
84	DFSW	I	DFCT selection pin
85	ATSK	I	Input pin for anti-shock

Pin No.	Pin Name	I/O	Function
86	DATA	I	Serial data input, supplied from CPU
87	XLAT	I	Latch input, supplied from CPU
88	CLOK	I	Serial data transfer clock input, supplied from CPU
89	COUT	O	Numbers of track counted signal output
90	DVDD	—	Digital power supply
91	MIRR	O	Mirror signal output
92	DFCT	O	Defect signal output
93	FOK	O	Focus OK output
94	FSW	O	Output to select spindle motor output filter
95	MON	O	Output to control ON/OFF of spindle motor
96	MDP	O	Output to control spindle motor servo
97	MDS	O	Output to control spindle motor servo
98	LOCK	O	GFS is sampled by 460 Hz. H when GFS is H
99	SSTP	I	Input signal to detect disc inner most track
100	SFDR	O	Sled drive output

• IC301 (CXD2565AM)

Pin No.	Pin Name	I/O	Function
1	INIT	I	Re-synchronizing at rise-up edge of this signal
2	SYM	—	System muting input
3	ATT	I	Attenuation data input
4	SHIFT	I	Shift clock input
5	LATCH	I	Latch clock input
6	384FS	O	384FS clock output
7	TEST1	—	Test pin. Fixed to "L" level during normal operation
8	DVss	—	Digital GND
9	TEST2	—	Test pin. Fixed to "L" level during normal operation
10	BCK	I	BCK input
11	DATA	I	Data input
12	LRCK	I	LRCK input
13	MUTEL	O	Not used
14	MUTER	O	Not used
15	DVDD1	—	Digital power supply
16	R1 (+)	O	R-ch PLM output-1 (positive phase)
17	AVDDR	—	L-ch analog power supply
18	R2 (+)	O	R-ch PLM output-2 (positive phase)
19	AVssR	—	L-ch analog GND
20	XVDD	—	Master clock power supply
21	XOUT	O	X'tal oscillator output (33.8 MHz)
22	XIN	I	X'tal oscillator input (33.8 MHz)
23	XVss	—	Master clock GND
24	AVssL	—	L-ch analog GND
25	L2 (+)	O	L-ch PLM output-2 (positive phase)
26	AVDDL	—	L-ch analog power supply
27	L1 (+)	O	L-ch PLM output-1 (positive phase)
28	DVDD2	—	Digital power supply

• IC201 (CXP82316-037Q)

Pin No.	Pin Name	I/O	Function
1	TIMER	—	Connected to +5V
2	RM	I	Audio bus input
3	+5V	—	Connected to GND
4	OPEN	—	} Not used. (open)
5	OPEN	—	
6	BUOUT	—	
7	PGML	O	Latch signal output to digital filter (IC301)
8	CLK	O	Serial clock output
9	SENSE	I	SENSE signal input
10	DATA	O	Serial data output
11	SQCK	O	Read out clock output for subcode Q data
12	SUBQ	I	Subcode Q data input
13	OPEN	—	Not used. (open)
14	AMUTE	O	Analog muting control signal output
15	LDON	O	Optical pickup laser diode control output
16	XLT	O	Serial data latch signal output
17	RV LED	O	Remote commander volume LED
18	RV+	—	} Not used. (open)
19	RV-	—	
20	LDOUT	O	} Loading motor control signal output
21	LDIN	O	
22, 23	KEY0, KEY1	I	Key input. (S202 to 212)
24 to 27	KEY2 to KEY5	—	Connected to +5V
28	ADJ/AFADJ	—	ADJ, AFJ test pin
29	IN/OUTSW	I	Loading IN/OUT switch input
30	RST	I	Reset signal input
31	EXTAL	I	Clock input. (4 MHz)
32	XTAL	O	Clock output. (4 MHz)
33	Vss	—	GND
34 to 41	OPEN	—	Not used. (open)
42 to 62	S1 to S21	O	FL segment output
63 to 70	1G to 7G	O	FL grid output
71	VFDP (-30V)	—	-30V pin for FL display tube
72	VDD (+5V)	—	} +5V pin
73	—	—	
74	SEL1 (H)	—	
75	+5V	—	} Connected to +5V
76	+5V	—	
77	+5V	—	
78	SCOR	I	Read out timing signal input for subcode Q data
79	SEL2 (L)	—	} Connected to +5V
80	SEL3 (L)	—	

SECTION 5

EXPLODED VIEWS

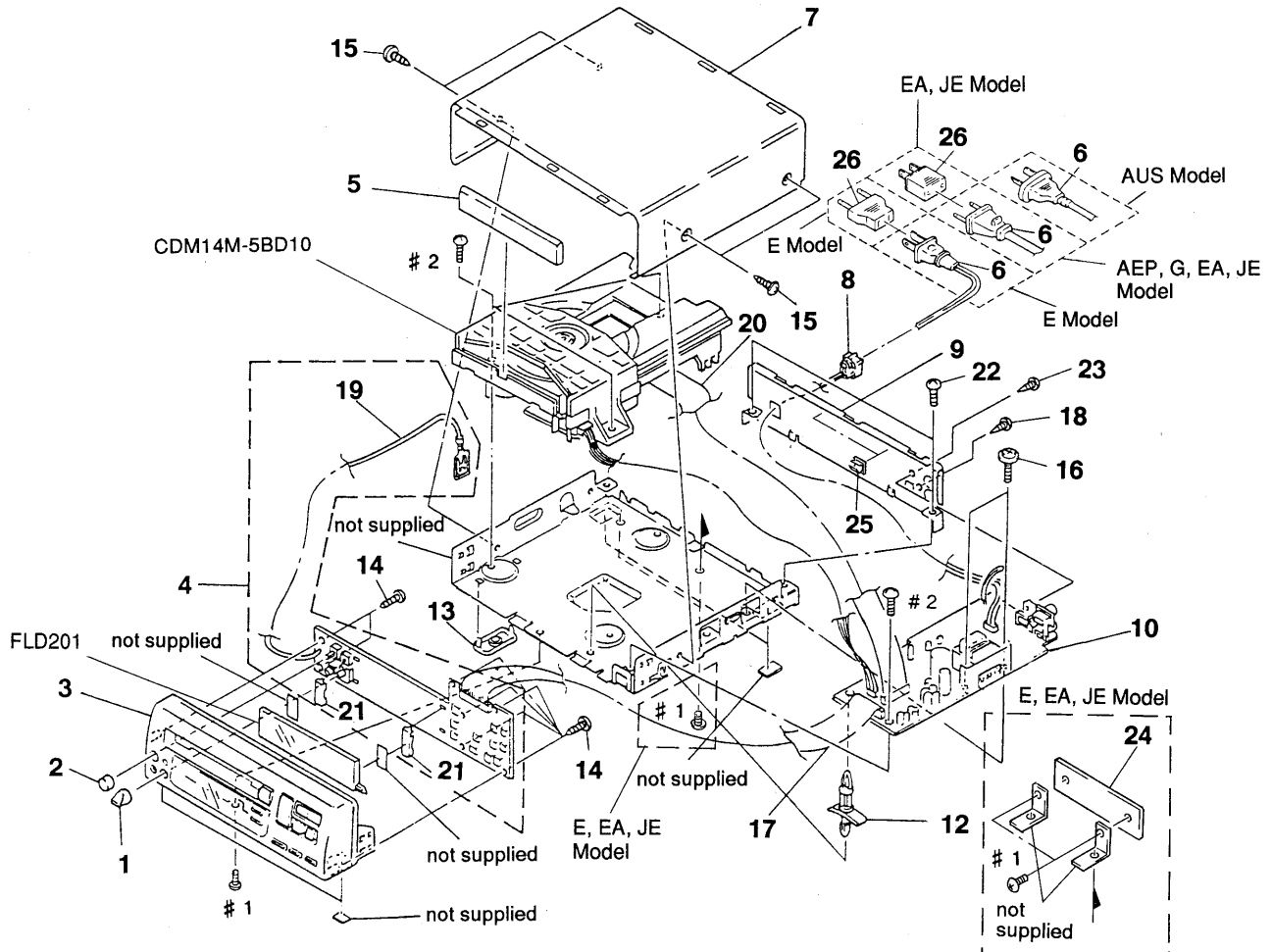
NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- G : German model
- AUS : Australian model
- EA : Saudi Arabia model
- JE : Tourist model

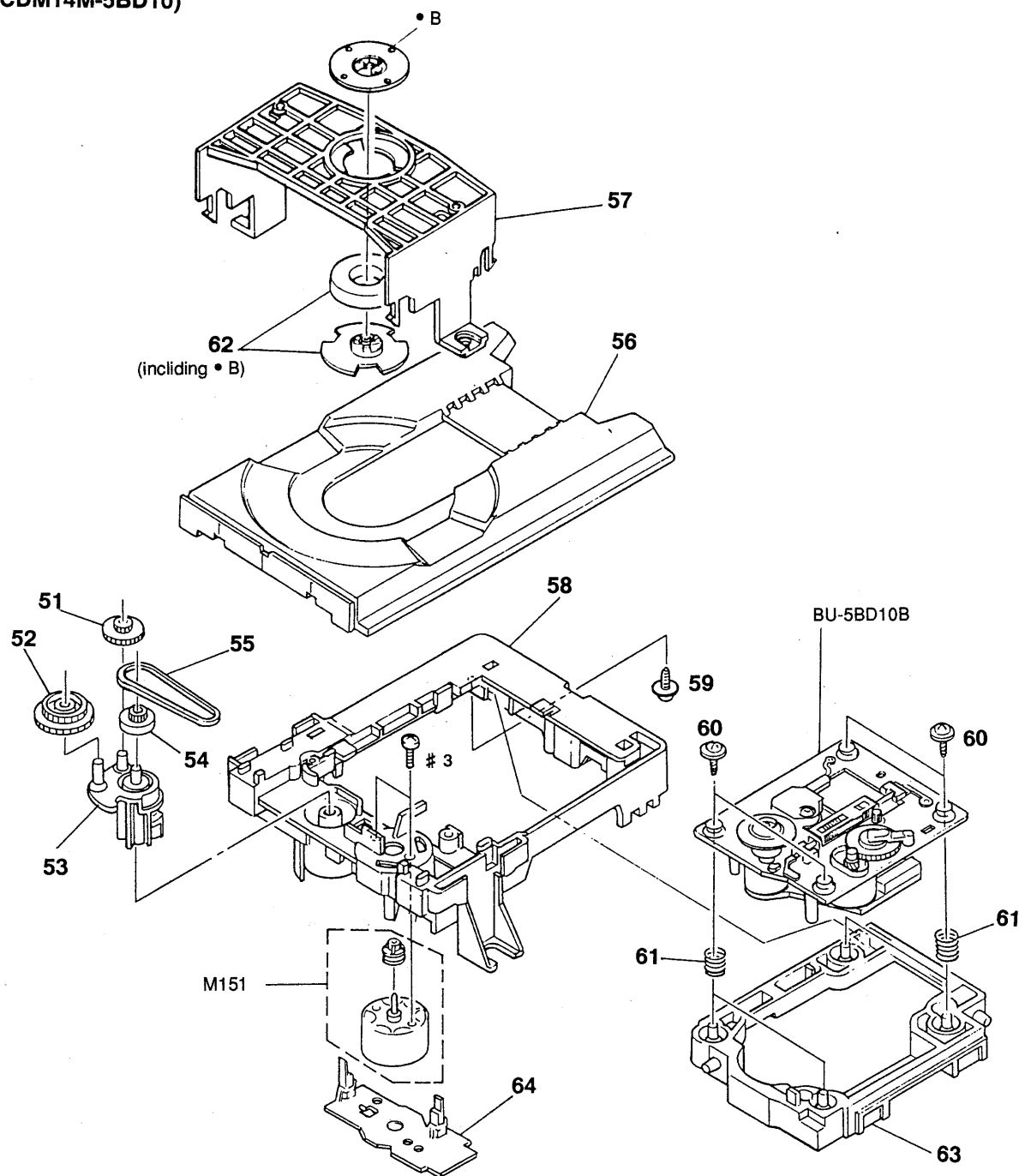
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

5-1. CABINET SECTION



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
1	4-961-259-01	KNOB (VOL)		* 12	4-924-098-01	HOLDER, PC BOARD	
2	4-961-260-01	BUTTON (POWER)		* 13	4-961-889-01	COVER (SCREW)	
3	X-4944-562-1	PANEL ASSY, FRONT		14	4-951-620-01	SCREW (2.6X8), +BVTP	
* 4	A-4673-058-A	DISPLAY BOARD, COMPLETE (E, EA, JE)		15	3-363-099-01	SCREW (CASE 3 TP2)	
* 4	A-4673-165-A	DISPLAY BOARD, COMPLETE (AEP, G, AUS)		16	4-886-821-11	SCREW, S TIGHT, +PTTWH 3X6	
5	4-961-255-01	PANEL, LOADING (AEP, G)		17	1-751-655-11	WIRE (FLAT TYPE) (25 CORE)	
5	4-961-255-11	PANEL, LOADING (E, AUS, EA, JE)		18	3-704-515-21	SCREW (BV/RING)	
	1-575-651-21	CORD, POWER (AEP, G, EA, JE)		* 19	1-690-880-11	LEAD (WITH CONNECTOR)	
	1-696-027-11	CORD, POWER (E)		20	1-537-619-11	JUMPER, FILM (WITH TERMINAL)	
	1-696-845-11	CORD, POWER (AUS)		* 21	4-961-264-01	HOLDER (FL TUBE 3.5)	
* 7	4-961-262-01	CASE		22	4-958-107-21	SCREW (BV/RING S TIGHT)	
* 8	3-703-244-00	BUSHING (2104), CORD (AEP, G, AUS, EA, JE)		23	3-704-515-21	SCREW (BV/RING) (AEP, AUS, G)	
* 8	3-703-571-11	BUSHING (S) (4516), CORD (E)		* 24	1-649-477-12	SWITCH BOARD (E, EA, JE)	
* 9	4-961-261-13	PANEL, BACK (E, EA, JE)		25	4-967-599-01	CLAMP	
* 9	4-961-261-22	PANEL, BACK (AEP, G)			1-569-007-11	ADAPTOR, CONVERSION 2P (E)	
* 9	4-961-261-31	PANEL, BACK (AUS)			1-569-008-11	ADAPTOR, CONVERSION 2P (EA, JE)	
* 10	A-4673-056-A	MAIN BOARD, COMPLETE (AEP, G)		FLD201	1-519-753-21	INDICATOR TUBE, FLUORESCENT	
* 10	A-4673-057-A	MAIN BOARD, COMPLETE (E, EA, JE)					
* 10	A-4673-131-A	MAIN BOARD, COMPLETE (AUS)					

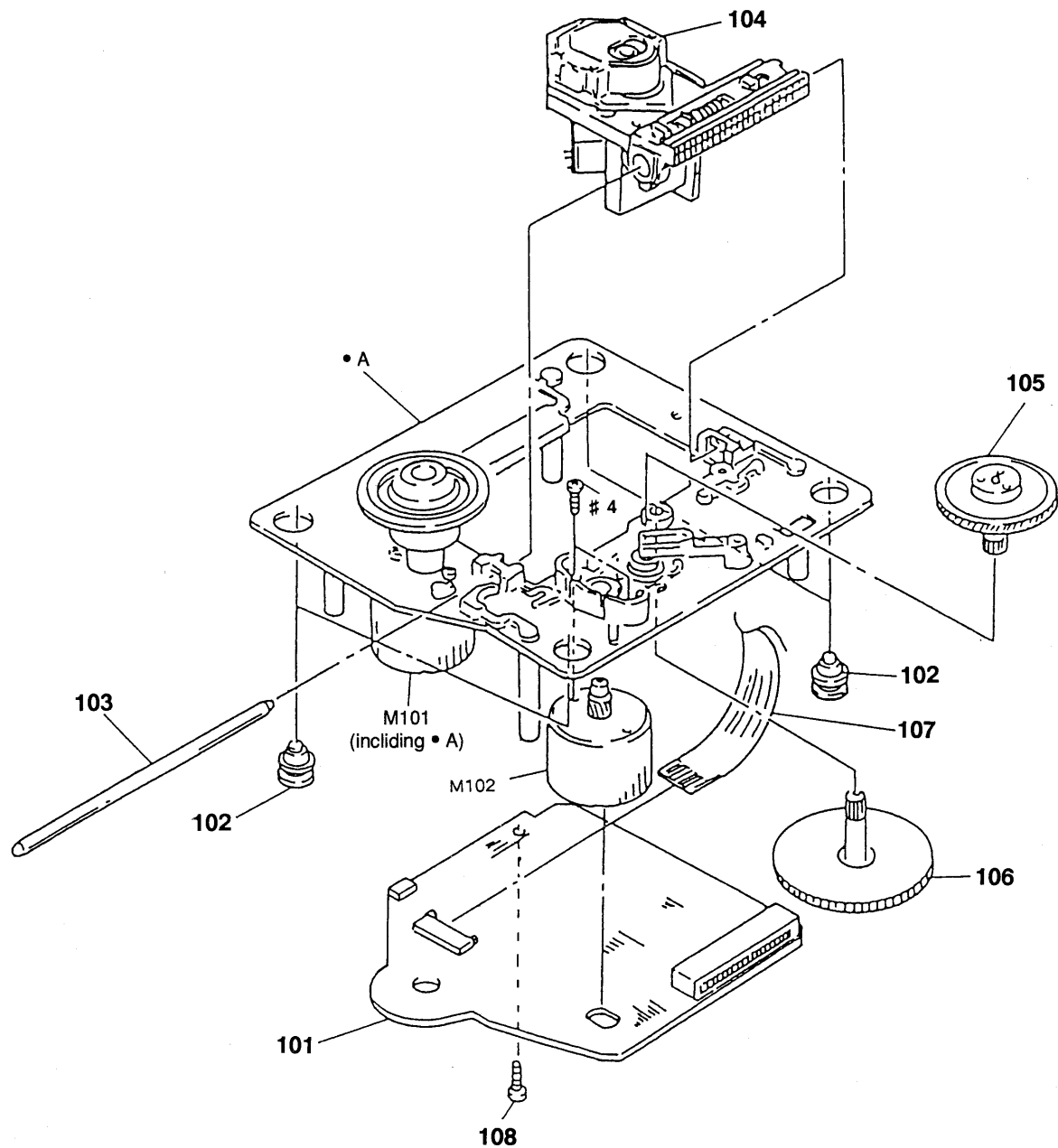
5-2. CD MECHANISM SECTION (CDM14M-5BD10)



Ref. No.	Part No.	Description
51	4-927-628-01	GEAR (C)
52	4-933-107-01	GEAR (PL)
53	4-933-109-01	CAM
54	4-927-651-01	PULLEY (S)
55	4-927-649-01	BELT
56	4-961-487-01	TABLE, DISK
57	4-933-110-01	HOLDER (MG)
58	4-933-111-01	CHASSIS (MD)

Remark	Ref. No.	Part No.	Description	Remark
	* 59	4-917-583-21	BRACKET, YOKE	
	60	4-933-134-01	SCREW (+PTPWH M2. 6X6)	
	61	4-959-996-01	SPRING (932), COMPRESSION	
	* 62	1-452-538-11	MAGNET	
	63	4-933-129-01	HOLDER (BU)	
	* 64	1-645-721-11	LOADING BOARD	
	M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

5-3. OPTICAL PICK-UP BLOCK SECTION (BU-5BD10B)



The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description
* 101	A-4649-432-A	BD BOARD, COMPLETE
102	4-951-940-01	INSULATOR (BU)
103	4-917-565-01	SHAFT, SLED
 104	8-848-144-11	OPTICAL PICK-UP BLOCK (KSS-240A)
105	4-917-567-01	GEAR (M)

Ref. No.	Part No.	Description
106	4-917-564-01	GEAR (P), FLATNESS
107	1-575-001-11	WIRE, FLAT TYPE (12 CORE)
108	4-951-620-01	SCREW (2.6X8), +BVTP
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)
M102	X-4917-504-1	MOTOR ASSY (SLED)

SECTION 6

ELECTRICAL PARTS LIST

NOTE:

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- G : German model
- EA : Saudi Arabia model
- AUS : Australian model
- JE : Tourist model

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE) ... (RED)

$\uparrow$
Parts color

$\uparrow$
Cabinet's color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	A-4649-432-A	BD BOARD, COMPLETE *****		R103	1-216-077-00	METAL CHIP 15K 5%	1/10W
		< CAPACITOR >		R104	1-216-085-00	METAL CHIP 33K 5%	1/10W
C101	1-163-005-11	CERAMIC CHIP 470PF 10%	50V	R105	1-216-097-00	METAL CHIP 100K 5%	1/10W
C102	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R106	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
C103	1-163-005-11	CERAMIC CHIP 470PF 10%	50V	R107	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
C105	1-135-155-21	TANTALUM CHIP 4.7uF 10%	16V	R108	1-216-073-00	METAL CHIP 10K 5%	1/10W
C106	1-164-346-11	CERAMIC CHIP 1uF	16V	R109	1-216-121-00	METAL CHIP 1M 5%	1/10W
C107	1-164-505-11	CERAMIC CHIP 2.2uF	16V	R110	1-216-025-00	METAL CHIP 100 5%	1/10W
C108	1-163-035-00	CERAMIC CHIP 0.047uF	50V	R112	1-216-049-00	METAL CHIP 1K 5%	1/10W
C109	1-163-011-11	CERAMIC CHIP 0.0015uF 10%	50V	R113	1-216-077-00	METAL CHIP 15K 5%	1/10W
C110	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V	R114	1-216-077-00	METAL CHIP 15K 5%	1/10W
C111	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	R117	1-216-077-00	METAL CHIP 15K 5%	1/10W
C112	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R118	1-216-077-00	METAL CHIP 15K 5%	1/10W
C113	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R121	1-216-077-00	METAL CHIP 15K 5%	1/10W
C123	1-164-232-11	CERAMIC CHIP 0.01uF	50V	R122	1-216-077-00	METAL CHIP 15K 5%	1/10W
C124	1-164-005-11	CERAMIC CHIP 0.47uF	25V	R123	1-216-073-00	METAL CHIP 10K 5%	1/10W
C151	1-163-007-11	CERAMIC CHIP 680PF 10%	50V	R124	1-216-097-00	METAL CHIP 100K 5%	1/10W
C152	1-163-007-11	CERAMIC CHIP 680PF 10%	50V	R125	1-216-049-00	METAL CHIP 1K 5%	1/10W
C153	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R126	1-216-049-00	METAL CHIP 1K 5%	1/10W
C154	1-164-336-11	CERAMIC CHIP 0.33uF	25V	R127	1-216-049-00	METAL CHIP 1K 5%	1/10W
C155	1-163-007-11	CERAMIC CHIP 680PF 10%	50V	R131	1-216-037-00	METAL CHIP 330 5%	1/10W
C156	1-163-007-11	CERAMIC CHIP 680PF 10%	50V	R151	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C157	1-163-033-00	CERAMIC CHIP 0.022uF	50V	R152	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C158	1-163-033-00	CERAMIC CHIP 0.022uF	50V	R153	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C159	1-163-023-00	CERAMIC CHIP 0.015uF 5%	50V	R154	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C160	1-163-019-00	CERAMIC CHIP 0.0068uF 10%	50V	R155	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C161	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R156	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
		< CONNECTOR >		R157	1-216-093-00	METAL CHIP 68K 5%	1/10W
* CN101	1-568-865-11	SOCKET, CONNECTOR 23P		R158	1-216-076-00	METAL CHIP 13K 5%	1/10W
CN102	1-568-795-11	SOCKET, CONNECTOR 12P		R159	1-216-085-00	METAL CHIP 33K 5%	1/10W
		< IC >		R160	1-216-081-00	METAL CHIP 22K 5%	1/10W
IC101	8-752-361-90	IC CXD2515Q		R161	1-216-308-00	METAL CHIP 4.7 5%	1/10W
IC102	8-759-071-79	IC BA6297AFP		R162	1-216-093-00	METAL CHIP 68K 5%	1/10W
		< RESISTOR >		R163	1-216-093-00	METAL CHIP 68K 5%	1/10W
R101	1-216-077-00	METAL CHIP 15K 5%	1/10W			< SWITCH >	
R102	1-216-097-00	METAL CHIP 100K 5%	1/10W	S101	1-572-085-11	SWITCH, LEAF (LIMIT)	

DISPLAY

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	A-4673-058-A	DISPLAY BOARD, COMPLETE (E, EA, JE)				< RESISTOR >	

*	A-4673-165-A	DISPLAY BOARD, COMPLETE (AEP, G, AUS)		R201	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
		*****		R202	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
				R204	1-216-097-00	METAL CHIP 100K 5%	1/10W
*	1-690-880-11	LEAD (WITH CONNECTOR)		R205	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
*	4-961-264-01	HOLDER (FL TUBE 3.5)		R206	1-216-051-00	METAL CHIP 1.2K 5%	1/10W
		< CAPACITOR >		R207	1-216-054-00	METAL GLAZE 1.6K 5%	1/10W
C201	1-163-037-11	CERAMIC CHIP 0.022uF 10% 25V		R208	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
C231	1-124-261-00	ELECT 10uF 20% 50V		R209	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
C202	1-163-038-00	CERAMIC CHIP 0.1uF 25V		R210	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
C203	1-163-038-00	CERAMIC CHIP 0.1uF 25V		R211	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
C251	1-163-275-11	CERAMIC CHIP 0.001uF 5% 50V		R212	1-216-051-00	METAL CHIP 1.2K 5%	1/10W
C252	1-163-275-11	CERAMIC CHIP 0.001uF 5% 50V		R213	1-216-054-00	METAL GLAZE 1.6K 5%	1/10W
C253	1-163-038-00	CERAMIC CHIP 0.1uF 25V		R214	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
		< CONNECTOR >		R215	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
CN201	1-764-006-11	CONNECTOR, FFC/FPC 25P		R216	1-216-049-00	METAL CHIP 1K 5%	1/10W
		< DIODE >		R217	1-216-295-00	METAL CHIP 0 5%	1/10W
D231	8-719-941-86	DIODE DAN202U		R231	1-216-066-00	METAL CHIP 5.1K 5%	1/10W
D232	8-719-977-74	DIODE DT227C		R232	1-216-066-00	METAL CHIP 5.1K 5%	1/10W
D233	8-719-977-12	DIODE DT26.8B		R233	1-216-097-00	METAL CHIP 100K 5%	1/10W
		< FLUORESCENT INDICATOR >		R234	1-216-097-00	METAL CHIP 100K 5%	1/10W
FLD201	1-519-753-21	INDICATOR TUBE, FLUORESCENT		R235	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
		< IC >		R236	1-216-079-00	METAL CHIP 18K 5%	1/10W
IC201	8-752-851-82	IC CXP82316-037Q		R251	1-216-019-00	METAL CHIP 56 5%	1/10W
IC202	8-749-923-80	IC GPU90XB		R252	1-216-019-00	METAL CHIP 56 5%	1/10W
		< JACK >		R253	1-216-053-00	METAL CHIP 1.5K 5%	1/10W
J201	1-750-925-11	JACK (SMALL TYPE) (PHONES)		R254	1-216-053-00	METAL CHIP 1.5K 5%	1/10W
		< COIL >				< VARIABLE RESISTOR >	
L251	1-410-375-11	INDUCTOR CHIP 3.3uH (E, EA, JE)		RV201	1-223-535-11	RES, VAR, CARBON 1K/1K (PHONE LEVEL)	
L251	1-414-234-11	INDUCTOR, FERRITE BEAD 3.3uH (AEP, G, AUS)				< SWITCH >	
L252	1-410-375-11	INDUCTOR CHIP 3.3uH (E, EA, JE)		S201	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)	
L252	1-414-234-11	INDUCTOR, FERRITE BEAD 3.3uH (AEP, G, AUS)		S202	1-554-303-21	SWITCH, TACTILE (EDIT/TIME FADE)	
L253	1-410-375-11	INDUCTOR CHIP 3.3uH (E, EA, JE)		S203	1-554-303-21	SWITCH, TACTILE (II)	
L253	1-414-234-11	INDUCTOR, FERRITE BEAD 3.3uH (AEP, G, AUS)		S204	1-554-303-21	SWITCH, TACTILE (◀◀, ▶▶)	
		< TRANSISTOR >		S205	1-554-303-21	SWITCH, TACTILE (▶▶, ▶▶)	
Q201	8-729-805-41	TRANSISTOR 2SC3398		S206	1-554-303-21	SWITCH, TACTILE (■)	
Q231	8-729-820-76	TRANSISTOR 2SA1179-M5M6		S207	1-554-303-21	SWITCH, TACTILE (CHECK)	
Q232	8-729-019-72	TRANSISTOR 2SB1260		S208	1-554-303-21	SWITCH, TACTILE (△ OPEN/CLOSE)	
Q251	8-729-023-22	TRANSISTOR 2SD2114K		S209	1-554-303-21	SWITCH, TACTILE (TIME)	
Q252	8-729-023-22	TRANSISTOR 2SD2114K		S210	1-554-303-21	SWITCH, TACTILE (REPEAT)	
				S211	1-554-303-21	SWITCH, TACTILE (▷)	
				S212	1-554-303-21	SWITCH, TACTILE (PLAY MODE)	
						< VIBRATOR >	
				X201	1-577-082-11	VIBRATOR, CERAMIC (4MHz)	

LOADING

MAIN

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-645-721-11	LOADING BOARD *****		C333	1-124-443-00	ELECT 100uF 20%	10V
		< CONNECTOR >		C334	1-124-443-00	ELECT 100uF 20%	10V
* CN151	1-568-943-11	PIN, CONNECTOR 5P		C341	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		< MOTOR >		C342	1-163-038-00	CERAMIC CHIP 0.1uF	25V
M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)		C343	1-163-135-00	CERAMIC CHIP 560PF 5%	50V
		< SWITCH >		C344	1-163-135-00	CERAMIC CHIP 560PF 5%	50V
S151	1-572-086-11	SWITCH, LEAF (LOAD OUT)		C351	1-163-038-00	CERAMIC CHIP 0.1uF	25V
S152	1-572-086-11	SWITCH, LEAF (LOAD IN)		C352	1-163-038-00	CERAMIC CHIP 0.1uF	25V
*****				C353	1-163-005-11	CERAMIC CHIP 470PF 10%	50V
*	A-4673-056-A	MAIN BOARD, COMPLETE (AEP, G)		C355	1-124-477-11	ELECT 47uF 20%	25V (AEP, G)
		*****		C356	1-136-165-00	FILM 0.1uF 5%	50V (AEP, G)
*	A-4673-057-A	MAIN BOARD, COMPLETE (E, EA, JE)		C901	1-126-936-11	ELECT 3300uF 20%	16V (AEP, G)
		*****		C901	1-124-556-11	ELECT 2200uF 20%	16V (E, AUS, EA, JE)
*	A-4673-131-A	MAIN BOARD, COMPLETE (AUS)		C902	1-126-939-11	ELECT 10000uF 20%	16V
		*****		C903	1-124-918-11	ELECT 47uF 20%	63V
		< CAPACITOR >		C904	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C301	1-126-176-11	ELECT 220uF 20%	10V	C906	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C302	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C910	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C303	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C911	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C304	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C951	1-124-903-11	ELECT 1uF 20%	50V
C305	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C952	1-124-907-11	ELECT 10uF 20%	50V
C306	1-163-222-11	CERAMIC CHIP 5PF 0.25PF	50V	C953	1-124-907-11	ELECT 10uF 20%	50V
C307	1-163-222-11	CERAMIC CHIP 5PF 0.25PF	50V	C954	1-163-275-11	CERAMIC CHIP 0.001uF 5%	50V
C308	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C955	1-124-120-11	ELECT 220uF 20%	25V
C309	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C956	1-124-903-11	ELECT 1uF 20%	50V
C310	1-124-584-00	ELECT 100uF 20%	10V	C957	1-124-472-11	ELECT 470uF 20%	10V
C311	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C958	1-124-907-11	ELECT 10uF 20%	50V
C312	1-124-584-00	ELECT 100uF 20%	10V	C959	1-124-907-11	ELECT 10uF 20%	50V
C313	1-163-038-00	CERAMIC CHIP 0.1uF	25V			< CONNECTOR >	
C314	1-124-443-00	ELECT 100uF 20%	10V	CN301	1-750-999-11	CONNECTOR, FFC/FPC 21P	
C315	1-163-038-00	CERAMIC CHIP 0.1uF	25V	CN302	1-764-002-11	CONNECTOR, FFC/FPC 25P	
C316	1-163-038-00	CERAMIC CHIP 0.1uF	25V	* CN303	1-568-954-11	PIN, CONNECTOR 5P	
C321	1-163-243-11	CERAMIC CHIP 47PF 5%	50V	CN903	1-564-687-11	PIN, CONNECTOR 3P (E, EA, JE)	
C322	1-163-243-11	CERAMIC CHIP 47PF 5%	50V	CN903	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P (AEP, G, AUS)	
C323	1-163-243-11	CERAMIC CHIP 47PF 5%	50V			< DIODE >	
C324	1-163-243-11	CERAMIC CHIP 47PF 5%	50V	D901	8-719-210-33	DIODE EC10DS2	
C326	1-163-038-00	CERAMIC CHIP 0.1uF	25V	D902	8-719-210-33	DIODE EC10DS2	
C327	1-163-038-00	CERAMIC CHIP 0.1uF	25V	D903	8-719-210-33	DIODE EC10DS2	
C329	1-163-143-00	CERAMIC CHIP 0.0012uF 5%	50V	D904	8-719-210-33	DIODE EC10DS2	
C330	1-163-143-00	CERAMIC CHIP 0.0012uF 5%	50V	D905	8-719-210-33	DIODE EC10DS2	
C331	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V	D906	8-719-210-33	DIODE EC10DS2 (AEP, G, AUS)	
C332	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V	D951	8-719-941-86	DIODE DAN202U	
				D952	8-719-914-42	DIODE DA204K	
				D953	8-719-941-86	DIODE DAN202U	

MAIN	SWITCH
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< IC >				R328	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
IC301	8-752-367-61	IC CXD2565AM		R331	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
IC302	8-749-921-12	IC GPIF32T (DIGITAL OUT OPTICAL)	(AEP, G)	R332	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
IC303	8-759-996-43	IC RC4558PS		R333	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
IC304	8-759-996-43	IC RC4558PS		R334	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
IC305	8-759-636-55	IC M5218AFP		R335	1-216-097-00	METAL CHIP 100K 5% 1/10W	
IC306	8-759-040-83	IC BA6287F		R336	1-216-097-00	METAL CHIP 100K 5% 1/10W	
IC951	8-759-821-93	IC LA5601		R337	1-216-049-00	METAL CHIP 1K 5% 1/10W	
< JACK >				R338	1-216-049-00	METAL CHIP 1K 5% 1/10W	
J301	1-750-679-11	JACK, PIN 2P (LINE OUT)		R339	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
< COIL >				R340	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
L301	1-410-375-11	INDUCTOR CHIP 3.3uH		R341	1-216-025-00	METAL CHIP 100 5% 1/10W	
L302	1-410-375-11	INDUCTOR CHIP 3.3uH		R342	1-216-025-00	METAL CHIP 100 5% 1/10W	
L303	1-410-375-11	INDUCTOR CHIP 3.3uH		R343	1-216-295-00	METAL CHIP 0 5% 1/10W	
L304	1-410-375-11	INDUCTOR CHIP 3.3uH		R351	1-216-021-00	METAL CHIP 68 5% 1/10W	
L351	1-410-322-11	INDUCTOR 3.3uH (AEP, G)		R352	1-216-021-00	METAL CHIP 68 5% 1/10W	
L352	1-410-322-11	INDUCTOR 3.3uH (AEP, G)		R353	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
L353	1-410-507-11	INDUCTOR 6.8uH (AEP, G)		R354	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
L951	1-410-658-31	INDUCTOR CHIP 220uH		R355	1-216-049-00	METAL CHIP 1K 5% 1/10W	
L952	1-410-658-31	INDUCTOR CHIP 220uH		R901	1-216-296-91	METAL GLAZE 0 5% 1/8W	
< TRANSISTOR >				R902	1-216-296-91	METAL GLAZE 0 5% 1/8W (E, EA, JE)	
Q301	8-729-023-22	TRANSISTOR 2SD2114K		R951	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
Q302	8-729-023-22	TRANSISTOR 2SD2114K		R952	1-216-025-00	METAL CHIP 100 5% 1/10W	
Q952	8-729-901-04	TRANSISTOR DTA114EK		R953	1-216-097-00	METAL CHIP 100K 5% 1/10W	
< RESISTOR >				< TRANSFORMER >			
R301	1-216-049-00	METAL CHIP 1K 5% 1/10W		△T301	1-450-213-31	TRANSFORMER, POWER (AEP, G, AUS)	
R302	1-216-037-00	METAL CHIP 330 5% 1/10W		△T301	1-450-214-31	TRANSFORMER, POWER (E, EA, JE)	
R303	1-216-049-00	METAL CHIP 1K 5% 1/10W		< VIBRATOR >			
R304	1-216-689-11	METAL CHIP 39K 0.5% 1/10W		X301	1-579-834-11	VIBRATOR, CRYSTAL (33MHz)	
R305	1-216-689-11	METAL CHIP 39K 0.5% 1/10W		*****			
R306	1-216-025-00	METAL CHIP 100 5% 1/10W		*	1-649-477-12	SWITCH BOARD (E, EA, JE)	
R307	1-216-065-00	METAL CHIP 4.7K 5% 1/10W		*****			
R308	1-216-689-11	METAL CHIP 39K 0.5% 1/10W		< CONNECTOR >			
R309	1-216-689-11	METAL CHIP 39K 0.5% 1/10W		* CN351	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P	
R310	1-216-296-91	METAL GLAZE 0 5% 1/8W		CN352	1-765-061-11	LEAD (WITH CONNECTOR) (3 CORE)	
R311	1-216-296-91	METAL GLAZE 0 5% 1/8W		< SWITCH >			
R312	1-216-295-00	METAL CHIP 0 5% 1/10W		△S351	1-572-675-11	SWITCH, POWER VOLTAGE CHANGE (VOLTAGE SELECTOR)	
R320	1-216-296-91	METAL GLAZE 0 5% 1/8W		*****			
R321	1-216-077-00	METAL CHIP 15K 5% 1/10W					
R322	1-216-077-00	METAL CHIP 15K 5% 1/10W					
R323	1-216-077-00	METAL CHIP 15K 5% 1/10W					
R324	1-216-077-00	METAL CHIP 15K 5% 1/10W					
R325	1-216-089-91	METAL GLAZE 47K 5% 1/10W					
R326	1-216-089-91	METAL GLAZE 47K 5% 1/10W					
R327	1-216-089-91	METAL GLAZE 47K 5% 1/10W					

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS *****	
△6	1-575-651-21	CORD, POWER (AEP, G, EA, JE)	
△6	1-696-027-11	CORD, POWER (E)	
△6	1-696-845-11	CORD, POWER (AUS)	
17	1-751-655-11	WIRE (FLAT TYPE) (25 CORE)	
20	1-537-619-11	JUMPER, FILM (WITH TERMINAL)	
* 62	1-452-538-11	MAGNET	
△104	8-848-144-11	OPTICAL PICK-UP BLOCK (KSS-240A)	
107	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

		ACCESSORIES & PACKING MATERIALS *****	
	1-467-316-11	REMOTE COMMANDER (RM-D320)	
	1-558-271-11	CORD, CONNECTION (AUDIO 108cm)	
△	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
△	1-569-008-11	ADAPTER, CONVERSION 2P (EA, JE)	
	3-757-486-11	MANUAL, INSTRUCTION (AEP, E, EA, AUS) (ENGLISH, FRENCH, SPANISH, CHINESE)	
	3-757-486-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, G)	
	3-795-629-11	INSTRUCTION (AEP)	
	4-920-941-01	SHEET (B), PROTECTION	
	4-962-615-01	COVER, BATTERY (for RM-D320)	
*	4-965-381-01	INDIVIDUAL CARTON (AEP, E, EA, G, JE)	
*	4-965-382-01	CUSHION (FRONT)	
*	4-965-383-01	CUSHION (REAR)	
*	4-967-373-01	INDIVIDUAL CARTON (AUS)	

		***** HARDWARE LIST *****	
#1	7-682-548-09	SCREW +BVT 3X8 (S)	
#2	7-682-547-09	SCREW +BVT 3X6 (S)	
#3	7-621-775-10	SCREW +B 2.6X4	
#4	7-621-255-15	SCREW +P 2X3	

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specified.